

Doctor of Nursing Practice with Specialization in Anesthesia Nursing

PREREQUISITE COURSES (REQUIRED)

Applicants are required to demonstrate satisfactory course completion with a letter grade of a C or better for a Statistics course. The Statistics course **must be transfer-equivalent** to one of the upper-level University of Iowa courses listed below. Refer to the University transfer equivalency web site at [MyUI](http://myui.uiowa.edu) for equivalent courses at other institutions.

UPPER-LEVEL STATISTICS (WITHIN 5 YEARS)	STAT:3510	Biostatistics	Statistical concepts and methods for the biological sciences; descriptive statistics, elementary probability, sampling distributions, confidence intervals, parametric and nonparametric methods, one-way ANOVA, correlation and regression, categorical data.
	or BIOS:4120	Introduction to Biostatistics	Application of statistical techniques to biological data including descriptive statistics, probability and distributions, sampling distributions, nonparametric methods, hypothesis tests, confidence intervals, analysis of categorical data, and simple linear regression.
	or PSQF:4143 or STAT:4143	Introduction to Statistical Methods	Analysis, interpretation of research data; descriptive statistics; introduction to probability, sampling theory, statistical inference (binomial, normal distribution, t-distribution models); linear correlation, regression.

SCIENCE BACKGROUND COURSES (STRONGLY RECOMMENDED)

COURSE / TOPIC	COMPARABLE* COURSE AT THE UNIVERSITY OF IOWA		
	NUMBER	TITLE	OVERVIEW
ANATOMY	ACB:3110	Principles of Human Anatomy	Gross and microscopic human anatomy; systemic approach to regional anatomy, with emphasis on clinical relevance
PHYSIOLOGY**	HHP:1300	Human Physiology	Introduction to function and regulation of the human body.
PATHOLOGY / PATHO-PHYSIOLOGY**	NURS:3518	Pathology	Introduction to abnormal functioning of cells, tissues, organs, and systems over the human lifespan; focus on hematological, immune, neurological, musculoskeletal, cardiovascular, respiratory, renal, gastrointestinal, endocrine, and reproductive system; alterations in metabolic processes and alterations in homeostatic mechanisms impacting the internal milieu; emphasis on critical thinking.
PHYSICAL ASSESSMENT+	NURS:3128	Health Assessment & Communication Across The Lifespan	Development and application of cognitive skills to perform systematic, holistic, and culturally competent health assessments; emphasis on application of clinical reasoning involving assessment, nursing diagnoses, interventions, and outcomes

* COURSES LISTED ARE COMPARABLE COURSES AT THE UNIVERSITY OF IOWA. SIMILAR OR HIGHER LEVEL COURSES AT THE UI OR OTHER INSTITUTIONS ARE OFTEN ACCEPTABLE. IF YOU HAVE QUESTIONS, ASK THE ANESTHESIA NURSING PROGRAM OFFICE. COURSES INTENDED FOR NON-SCIENCE MAJORS ARE GENERALLY NOT ADEQUATE. PRE-PROFESSIONAL SCIENCE COURSES ARE PREFERRED.

** SOME CURRICULUM MODELS INCLUDE COMBINED PATHOLOGY/PATHO-PHYSIOLOGY COURSES. IN THIS CASE A TOTAL OF 6 S.H. OF COMBINED PATHOLOGY/PATHO-PHYSIOLOGY COURSES IS ACCEPTABLE.

+ SOME CURRICULUM MODELS INTEGRATE PHYSICAL ASSESSMENT AND/OR PHARMACOLOGY THROUGHOUT THE PROGRAM. IT MAY BE NECESSARY TO PROVIDE DOCUMENTATION

SCIENCE BACKGROUND COURSES (STRONGLY RECOMMENDED) - CONTINUED

COURSE / TOPIC	COMPARABLE* COURSE AT THE UNIVERSITY OF IOWA		
	NUMBER	TITLE	OVERVIEW
PHARMACOLOGY +	NURS:3138 / 3438	Nursing Pharmacological Interventions I / II	Basic biophysical concepts that inform nursing and pharmacological interventions, including sleep, immobility, skin care, wound healing, infection, and human response to illness; selected disorders and/or diseases, including GI disease, disorders of bowel and urine elimination, diabetes, and cancer; introduction to health literacy and principles of health education.
GENERAL BIOLOGY	BIOL:1141	Introductory Animal Biology	Fundamental principles: cells and macromolecules, energy metabolism, organismic physiology, genetics, development, ecology, and evolution.
(ANIMAL) or (HUMAN)	or BIOL:1140	Human Biology	Molecular and cellular basis of human life; integration of humans and the biosphere through photosynthesis, respiration; structure, function of human tissues, organs, organ systems; reproduction, genetics, impact of molecular biology and genetic engineering.
MICROBIOLOGY	MICR:3164	Nursing Microbiology	Overview of bacteria, viruses, and eukaryotic microorganisms that cause human disease; Microbial structure, growth control, and reproduction; immunology & host defenses.
INORGANIC CHEMISTRY	CHEM:1070	General Chemistry I	Atomic structure, chemical bonds, mole relations, stoichiometry, states of matter, acids and bases, reaction rates, electrochemistry, nuclear chemistry.
ORGANIC CHEMISTRY	CHEM:1080	General Chemistry II	Organic chemistry and biochemistry.
BIO-CHEMISTRY	CHEM:1080	General Chemistry II	Organic chemistry and biochemistry.
COLLEGE MATHEMATICS	MATH:1440	Mathematics for the Biological Sciences	Relations, functions, coordinate systems, graphing, polynomials, trigonometric functions, logarithmic and exponential functions; discrete mathematics, probability; examples and applications from biological sciences.
COLLEGE PHYSICS	PHYS:1400	Basic Physics	Quantitative treatment of mechanics, electricity, heat, liquids, gases, and atomic, nuclear, and elementary particle physics.

Your undergraduate nursing curriculum may not meet the entire list of anesthesia nursing program background courses. If this applies to you and you plan to apply to the UI Anesthesia Nursing Program, in order to be more competitive, you may need to build these prerequisites into your curriculum pattern as electives or take them after graduation.

COMPUTER COMPETENCY SKILLS	Applicants are expected to have mastered a basic to intermediate level of computer competency in preparation for successful navigation of the DNP program.
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